

What is claimed is:

1. A routing system operable on a data-packet-network for intelligent routing of instant messages between clients connected to the network and customer service representatives (CSRs) connected to the network comprising:

at least one instant message server connected to and addressable on the network; and

at least one intermediate server connected to and addressable on the network and accessible to the instant message server the intermediate server having access to routing rules and capability;

characterized in that clients connected to the network and operating instant message software connect to the instant message server for the purpose of establishing communication with available customer service representatives, and wherein assertion of a connection link advertised by the instant message server establishes bi-directional communication between the client machine and the intermediate server, the intermediate server interacting with including identifying the client and version of instant message software used by the client for the purpose of routing the client request to an appropriate customer service representative thereby establishing an active instant message connection between the client and the selected customer service representative.

2. The routing system of claim 1 wherein the data-packet-network is the Internet network.

3. The routing system of claim 1 wherein the client connection comprises a network appliance capable of instant messaging operationally coupled to the network.

5 4. The routing system of claim 1 wherein customer service representative connection comprises a network appliance capable of instant messaging operationally coupled to the network.

10 5. The routing system of claim 3 wherein the network appliance is a computer.

6. The routing system of claim 4 wherein the network appliance is a computer.

15 7. The routing system of claim 1 wherein the customer service representatives are human resources.

8. The routing system of claim 1 wherein the customer service representatives include automated systems.

20 9. The routing system of claim 1 wherein the addressing system of the network is Internet protocol addressing.

25 10. The routing system of claim 1 wherein the at least one instant message server retains responsibility of hosting ongoing communication between clients and customer service representatives.

11. The routing system of claim 1 wherein the at least one intermediate server is granted the responsibility of hosting ongoing communication between clients and customer service representatives.

5 12. The routing system of claim 1 wherein the client, customer service representative, and intermediate server involved in a single routed and established communication channel run instant messaging software compatible to that hosted by the instant message server used to initiate the connection.

10 13. The routing system of claim 1 wherein the customer service representatives are agents operating within a communication center and connected to a local area network.

15 14. The routing system of claim 1 wherein the customer service representatives are remote agents operating from addressable locations on the network not confined to one location.

20 15. The routing system of claim 13 wherein the at least one intermediate server requests and receives routing instructions from a separate server containing an intelligent routing software suite used for disposing all communication events occurring within the center.

25 16. The routing system of claim 1 wherein the routing capability includes routing based on customer service representative availability.

17. The routing system of claim 1 wherein the routing capability includes routing based on skill level of a customer service representative.

18. A proxy server for routing instant messages sourced from clients
connected to a data-packet-network to selected ones of a plurality of
customer service representatives connected to the network and representing
5 an enterprise:

at least one bi-directional data port for receiving data thereto and
sending data there from;

at least one version of instant messaging software executable therein
for generating, sending, and receiving instant messages;

10 a software routing component executable therein for routing client
instant message requests to selected IP addresses on the network; and

a software firewall component operable therein and capable of IP
address translation;

15 characterized in that the server receives incoming instant message
events for routing, identifies and interacts with individual clients using instant
message protocol and routes qualified requests to available customer service
representatives based on enterprise routing rules for instant messaging.

19. The proxy server of claim 18 wherein the data-packet-network is the
20 Internet network.

20. The proxy server of claim 18 wherein the client connection comprises a
network appliance capable of instant messaging operationally coupled to the
network.

25 21. The proxy server of claim 18 wherein the customer service
representative connection comprises a network appliance capable of instant
messaging operationally coupled to the network.

22. The proxy server of claim 20 wherein the network appliance is a computer.

5 23. The proxy server of claim 21 wherein the network appliance is a computer.

24. The proxy server of claim 18 wherein the customer service representatives are human resources.

10

25. The proxy server of claim 18 wherein the customer service representatives include automated systems.

15

26. The proxy server of claim 18 wherein after establishing a routed connection, the same server continues to host the communication transaction.

20

27. The proxy server of claim 18 wherein routing destination is determined as a result of executed routing routines according to routing rules.

25

28. The proxy server of claim 27 wherein the routing rules and executed routing routines are generic to a transaction server running a software suite for determination of internal routing for all multimedia and COST events occurring within the center.

29. The proxy server of claim 18 wherein the routing capability includes routing based on customer service representative availability.

30. The proxy server of claim 18 wherein the routing capability includes routing based on skill level of a customer service representative.

31. A method for establishing an instant message communication channel
5 over a data-packet-network between a client and a customer service representative representing an enterprise based on returned results of at least one executed routing routine comprising steps of:

- (a) client establishment of a network connection;
- (b) establishing a client-to-server connection with an instant message
10 server using an instant messaging software application;
- (c) establishing a connection from the instant message server to an intermediary proxy server through client link assertion;
- (d) the proxy server interacting with the client using instant messaging software to obtain information for routing;
- 15 (e) the proxy server requesting execution of at least one intelligent routing routine on behalf of the client request and information obtained through client interaction; and
- (f) routing the client request from the proxy server to an appropriate customer service representative based on results of routine execution.

20 32. The method of claim 31 wherein the data-packet-network is the Internet network.

33. The method of claim 31 wherein in step (a) client connection comprises a
25 network appliance having instant messaging capability operationally coupled to the network.

34. The method of claim 33 wherein in step (a) the network appliance is a computer.

35. The method of claim 31 wherein in step (c) wherein the instant message
5 server optionally re-directs the client to the proxy server and relinquishes communication hosting.

36. The method of claim 31 wherein in step (d) the interaction results in at least client identification, version identification of instant message software
10 used by the client, and a reason for requesting communication with a customer service representative.

37. The method of claim 31 wherein in step (e) the at least one routing routine comprises an availability determination of existence of a network-
15 connected customer service representative having a compatible instant messaging software to that used by the client.

38. The method of claim 37 wherein in step (e) the at least one routing routine further comprises a skill level determination.

39. The method of claim 31 wherein in step (e) the execution request is handled by a separate server running a routing software suite for routing communication events within the enterprise.

40. The method of claim 31 wherein in step (f) the proxy server hosts the ongoing routed and established communication transaction.

41. The method of claim 31 wherein in step (f) the instant message server continues to host the ongoing routed and established transaction.

42. The method of claim 31 wherein in step (f) the transaction is conducted through a firewall.

5

10

15

20

25